"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, M.B.; KAYAKOVA, M.Ye.; UKHANOV, Ye.V.

New find of stibiotantalite. Trudy Min. muz. no.15:251-255 '64.
(MIRA 17:11)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, M.B.; OSOLODKINA, G.A.; RAZMANOVA, Z.P.

Milarite from central Kazakhstan. Dokl. AN SSSR 159 no.6:1305-1308 D '64 (MIRA 18:1)

1. Mineralogicheskiy muzey im. A. Ye. Fersmana AN SSSR. Predstavleno akademikom N.V. Belovym.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

TSYGAN, V.T.; CHISTYAKOVA, M.F.; BYKOV, P.N.; GUREVICH, M.A.; SHCHEGOL'KOVA, L.A.

Thermostatic devices for X-ray cameras. Zav. lab. 30 no.5:630 '64. (MIRA 17:5)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut redkometallicheskoy promyshlennosti.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

ISTYAKOVA, M. V.
USSR/Chemistry - Aromatic hydrocarbon oxidation FD-679

Card 1/1 : Pub. 129 - 14/25

Author : Eventova, M. S.; and Chistyakova, M. V.

Title : Oxidation of aromatic hydrocarbons by oxygen; oxidation of 1,3-diphenyl-propane and 1,4-diphenybutane

Periodical : Vest. Mosk. un., Ser. fizikomat. i yest. nauk, Vol. 9, No. 3, 91-100, May 1954

Abstract : Investigate the influence of the length of a paraffin chain linking two phenyl groups on the ease of oxidation by oxidation at 175° C with a circulating current of oxygen flowing 6 liters/minute for 3 hours. Find that (a) hydrocarbons containing odd numbers of carbon atoms in the chain are more stable; (b) in the hydrocarbon series with even or odd numbers of methylene groups in the paraffin chain the tendency to oxidation increases with increasing molecular weight; (c) the oxygen attack is directed towards both carbon atoms in the alpha, alpha'positions relative to the phenyl group. The decomposition of the dihydroperoxides formed leads to the formation of acids and carbonyl compounds. Propose a mechanism for the reaction.

Institution : Chair of Petroleum Chemistry

Submitted : October 6, 1953

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA M. V.

7

Oxidation of aromatic hydrocarbons with oxygen. B. S. Tsentova, P. P. Borisov, M. V. Chistyakova, and E. A. Matveeva. *Vestnik Moskov. Univ., Ser. Fiz.-Mat. i Estestven. Nauk* No. 5, 77-84(1955).—$Ph(CH_2)_2Ph$ (I) and $Ph(CH_2)_3Ph$ (II) were exposed to O 3 hrs. at 175° at the rate of 6 l./hr. Among the products of oxidation of I (total 23%) were CO_2, BzOH, AcOH, and small amts. of PhOH and glutaric acid. The oxidation products of II (total 42.5%) included H_2O, CO, CO_2, neutral tars, and traces of PhOH and adipic acid. It must be assumed that the reaction proceeds via the cleavage of the intermediate α,α'-dihydroperoxide at the C atoms in α,α'-positions to the Ph nuclei. The total oxidation products of $(PhCH_2)_2CH$ at 175°, 3 and 6 hrs., and at 205°, 3 hrs., resp., were 7, 19, and 20% and of $(PhCH_2CH_2)_2CH$ (III) 34, 68, and 64%, resp.; the absence of even traces of PhOH at the lower temp. indicates the firmness of the bond; increasing the temp. or duration did not change the direction of the reaction; only a small amt. of PhOH was formed after 6 hrs., none formed after 3 hrs. at 205°. There were more tars in the oxidation of III. B. Gutoff

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Chem

PMA

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

Chistyakova, M.V.

EVENTSOVA, M.S.; BORISOV, P.P.; CHISTYAKOVA, M.V.; LARINA, I.M.

Oxidation of aromatic hydrocarbons by oxygen. Oxidation of 1,1-diphenylethane and 1,1-diphenylpropane. Vest.Mosk.un.Ser. mat.,mekh., astron., fiz.,khim. 12 no.2:209-213 '57. (MIRA 10:12)

1.Kafedra organicheskoy khimii i khimii nefti Moskovskogo universiteta.

(Oxidation) (Ethane) (Propane)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

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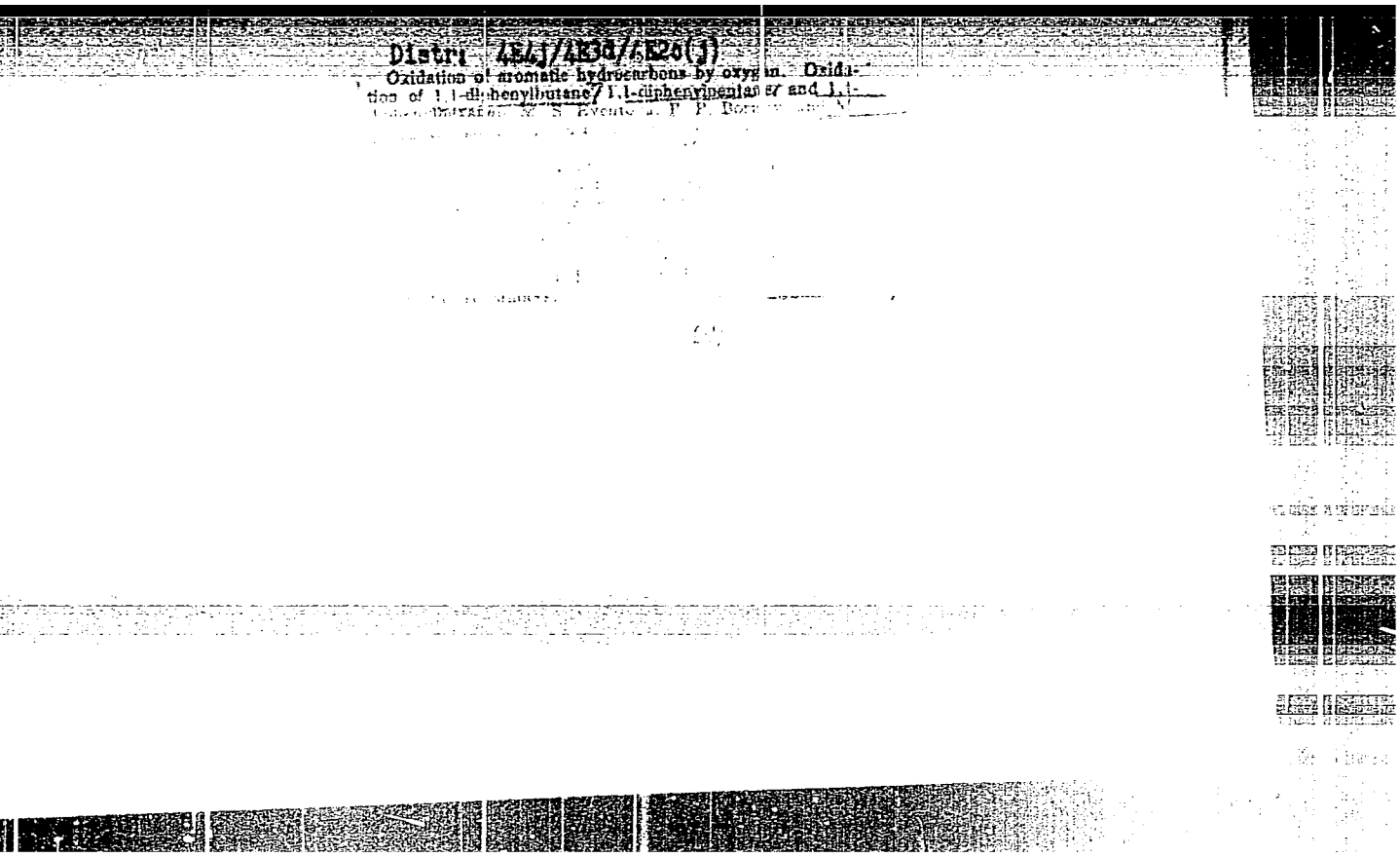

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

SOV/20-121-2-29/53

AUTHORS: Korshak, V. V., Corresponding Member, Academy of Sciences, USSR, Sosin, S. L., Chistyakova, M. V.

TITLE: The Use of the Polyrecombination Reaction in the Production of Polymers (Primeneniye reaktsii polirekombinatsii dlya polucheniya polimerov)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 121, Nr 2, pp. 299 - 302 (USSR)

ABSTRACT: Many scientists have observed the effect of free radicals forming due to the decomposition of peroxides on the formation of compounds which are dimers of those radicals which are the residue of the solvent after the subtraction of a hydrogen atom (Ref 1). The authors could prove that the reaction may, on certain conditions, take such a course that it does no longer supply dimers of the solvent but only high-molecular compounds (Ref 2). This takes place because of a polyrecombination reaction. The present article describes new experimental results. The p-di-isopropyl benzene was the initial substance while various peroxides (mainly tertiary butyl peroxide) served as

Card 1/4

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

The Use of the Polyrecombination Reaction in the Production of Polymers

a source of the free radicals. The mentioned peroxide was added gradually to a layer of hydrocarbon at 170 - 200°. On this occasion a polymer formed which contains, according to the conditions of reaction, a smaller or larger amount of the insoluble three-dimensional part. The soluble part was extracted by benzene and was precipitated with methanol. The polymer is a white powder with a melting point of 210 - 230°. It was proved radiographically that the degree of crystallization of the soluble polymer does not exceed 10% and that for this reason it has to be regarded as practically amorphous. The insoluble polymer decomposes at about 300°; its degree of crystallization reaches 60%. Figure 1 shows that with the increasing amount of peroxide also the molecular weight of the polymer produced increases. At a molar ratio of peroxide and hydrocarbon = 1 the latter is practically converted completely into various reaction products. The amount of high molecular products reaches, however, 100% only at the mentioned ratio = 3. Thus the first mole of the peroxide reacts with the initial hydrocarbon. The 2nd and 3rd moles, however, react already with the products of conversion which represent a mixture of

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

The Use of the Polyrecombination Reaction in the Production of Polymers

di- and trimers. The first stage is the decomposition of the peroxide with the formation of free radicals. They are tertiary butoxyl-as well as methyl radicals. They are at different ratios depending on the temperature and the properties of the solvent. About half of the peroxide decomposes under the formation of butoxy radicals. The higher the temperature the more marked becomes the decomposition under the formation of methyl radicals. The authors describe further conversions and characterize the reaction discussed as one related to the polycondensation. Table 1 shows the results obtained in using other initial products.
There are 2 figures, 1 table, and 5 references, 1 of which is Soviet.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR (Institute of Elemental Organic Compounds, AS USSR)

SUBMITTED: March 28, 1958

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

SOV/20-121-2-29/53

The Use of the Polyrecombination Reaction in the Production of Polymers

Card 4/4

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

KORSHAK, V.V.; SOSIN, S.L.; CHISTYAKOVA, M.V.

Obtaining macromolecular compounds by the reaction of polyrecombination. Vysokom.soed. 1 no.7:937-945 Jl '59. (MIRA 12:11)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Macromolecular compounds) (Polymerization)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, M.V.

Polymers of carbonyl compounds. Usp. khim. 31 no.4:452-473 '62. (MIRA 16:8)

1. Vladimirskiy nauchno-issledovatel'skiy institut sinteticheskikh smol.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

L 9550-66 EWT(m)/EWP(j)/T/ETC(m) WW/RM

ACC NR: AP6000328 (N) SOURCE CODE: UR/0286/65/000/021/0014/0015

44,55 44,55 16 E

INVENTOR: Kryuchkov, F. A.; Chistyakova, M. V.

ORG: none

15, 55, 44 15

TITLE: Preparation of foamed polyurethanes. Class 12, No. 175941

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 21, 1965, 14-15

TOPIC TAGS: polyurethane, foam plastic

ABSTRACT: An Author Certificate has been issued for a preparative method of fire-resistant foamed polyurethanes from isocyanates and chloral-modified polyhydric alcohols. [BO]

SUB CODE: 11/ SUBM DATE: 21Apr62/ ATD PRESS: 4150

Card 1/1 UDC: 678.664

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, N., inzh.

Quantum amplifiers and generators of light. IUn.tekh. 6 no.9:20-25 S '61. (MIRA 14:10)

(Masers)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

SOV/48-23-8-20/25

24(3)

AUTHORS: Solntsev, G. S., Porokhin, A. G., Chistyakova, N. M.

TITLE: Measurement of Electric Fields of High-frequency Discharges at Low Pressure by Means of an Electron Beam

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959, Vol 23, Nr 8, pp 1026-1030 (USSR)

ABSTRACT: In a high-frequency discharge the electric field consists of a superposition of the alternating field of high frequency on the constant field caused by spatial distribution of charges in the discharge space. Measurement of the electric field by means of the deflection of an electron beam was used for several investigations (Refs 1,2). In part I of the present paper, the experimental methods are described which were applied by the authors. The construction of the discharge plant is described in figure 1. It consists of a discharge tube, perpendicular to it are placed an electron accelerator and an observation screen. The discharge space may be changed by moving one of the electrodes from outside by means of a magnet. The shift of the electron beam is photographically recorded on the luminous screen. Figure 2 represents an example. To apply this method

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

Measurement of Electric Fields of High-frequency Discharges at Low Pressure by Means of an Electron Beam

it is necessary that the time τ, which the electrons need to traverse the discharge space, is less than the oscillation period T. In the diagram of figure 1, the dependence of τ/T on frequency is described for four different acceleration voltages. It is found that the skin effect is of less importance, that the electric eddy field is negligible, and that the perturbation of electrons must be low in the space under discussion. The measurement results of experiments carried through in argon at a pressure of 10^{-2} torr and a frequency of 3.3 megacycles are summarized by the diagrams of figure 4. They show the distribution of the electric high-frequency field and of the space-charge field. Further, the instantaneous distribution of the potentials is investigated, and the distribution of the space-charge at various instants of the period is calculated by means of Poisson's equation. The results are shown in the diagram of figure 7 for three different phases. There are 7 figures and 5 references, 2 of which are Soviet.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

SOV/48-23-8-20/25

Measurement of Electric Fields of High-frequency Discharges at Low Pressure by Means of an Electron Beam

ASSOCIATION: Moskovskiy gos. universitet im. M. V. Lomonosova Fizicheskiy fakul'tet (Moscow State University imeni M. V. Lomonosov, Department of Physics)

Card 3/3

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, N. P.

Pharmacology teaching in the light of Pavlov's theories. Feldsher & akush, Moskva no. 10: 53-57 Oct. 1951. (CLML 21:3)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, N. P.

Farmakologiya i retseptura (Pharmacology and prescriptions) Uchebnik dlya meditsinskikh sester. Moskva, Medgiz, 1953.
287 p. illus., ports., diagrs., tables.

N/5
647
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APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, N.P. [author]; KUDRIN, A.N., dotsent [reviewer].

"Pharmacology and prescription writing." N.P.Chistiakova. Reviewed by A.N. Kudrin. Fel'd.i akush. no.10:60-63 O '53. (MLRA 6:10)
(Pharmacology) (Formulae, receipts, prescriptions) (Chistiakova, N.P.)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, N.P.

[Pharmacology and prescription writing; textbook for nurses] Farmakologiia i retseptura; uchebnik dlia meditsinskikh sester. 2 izd. Moskva, Medgiz, 1954. 299 p. (MLRA 7:7)
(Pharmacology) (Prescription writing)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, N. P.
USSR/Medicine - Pharmacology

FD-1915

Card 1/1 Pub. 38-14/18

Author : Chistyakova, N. P. [reviewed by Kudrin, A. N.]; Grishchenko, I. I. [reviewed by Mashkovskiy, M. D., Professor]

Title : Farmakologiya i retseptura, uchebnik dlya meditsinskikh sester [Pharmacology and prescriptions, a textbook for nurses] Second edition; Obezbolivaniye v rodakh [Painlessness in Births]

Periodical : Farm. i. toks., 17, 54-55 Nov/Dec 1954

Abstract : The two books listed above with their authors given in the same order, are reviewed. The reviewer of the first book describes the contents briefly and gives a favorable review. The greatest shortcoming of this book is in the part on prescriptions and individual pharmacology, where not enough information was given on the matter of filling out prescriptions. This book was published by Medgiz in Moscow, 1954. Circulation: 50,000. The other book, which was published by the Khar'kov State Scientific-Medical Library in Khar'kov, 1953, also received a favorable review. This book contains a bibliography of USSR literature on painless birth.

Institution:

Submitted :

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

ZAKUSOV, Vasiliy Vasil'yevich; CHISTYAKOVA, N.P., red.; LYUDKOVSKAYA, N.I., tekhn.red.

[Pharmacology] Farmakologiia. Moskva, Gos.izd-vo med.lit-ry Medgiz, 1960. 427 p. (MIRA 14:4)

1. Deystvitel'nyy chlen AMN SSSR (for Zakusov).
(PHARMACOLOGY)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

POPOV, K.S.; CHISTIAKOVA, N.P.

Malic acid content of Champagne wines and Soviet and French Champagne. Trudy VNIIViV "Magarach" 9:168-178 '60. (MIRA 13:11)
(Champagne (Wine)) (Malic acid)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

SHVARSALON, Nikolay Semenovich, prof.; CHISTYAKOVA, N.P., red.; MIRONOVA, A.M., tekhn. red.

[Handbook on practical tasks in making prescriptions] Rukovodstvo k prakticheskim zaniatiiam po retseptu:e. Moskva, Medgiz, 1962. 122 p. (MIRA 15:7)

(PRESCRIPTION WRITING)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

KUDRIN, Aleksandr Nikolayevich; ZAYDLER, Yakov Izrailevich; ZOLOTUKHIN, Stepan Ivanovich; CHISTIAKOVA, N.P., red.; MATVEYEVA, M.M., tekhn. red.

[Manual on practical work in pharmacology] Rukovodstvo k prakticheskim zaniatiiam po farmakologii. Moskva, Izd-vo "Meditsina," 1964. 210 p. (MIRA 17:3)

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APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, N.V.; ZLOBINA, V.A.

Manufacture of velour leather from pigskins. Kozh.-obuv. prom. 2 no. 12:27-29 D '60. (MIRA 14:1)
(Leather)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

GORINA, F.A., inzh.; CHISTYAKOVA, N.V., inzh.

Rapid method for determining the degree of polymerization of polymethylacrylate of "No.1" and "A" make acrylic emulsions. Kozh.-obuv.prom. 5 no.4:15-18 Ap '63. (MIRA 16:5)
(Polymerization) (Acrylic acid)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, N.V., inzh.

Norms of the adhesion of acrylonitrile film coatings to the chrome leather for shoe uppers. Kozh.-obuv.prom. 5 no.10:30-32 O '63. (MIRA 17:4)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, N.V., inzh.; ZHUKOV, V.I.

Use of the MKh-30-1 dispersion for the finishing of "DOL"chrome pigskins. Kozh. obuv. prom. 6 no.6:30-32 Je '64. (MIRA 17:9)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, N.V.; ZHUKOV, V.I.; ZLOBINA, V.A.

Production of chrome shoe leather from the sides of cattle hides. Kozh.-obuv. prom. 7 no.5:26-28 My '65. (MIRA 18:8)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, O. N.

"History of the Developing of the Conducting System in Horsetails," Thesis for degree of Cand. Biological Sci. Sub. 22 May 50, Moscow City Pedagogical Inst. imeni V. P. Potemkin.

Summay 71, 4 Sept. 1954. Dissertations Presented for Degrees in Sci. and Engineering in Moscow in 1950. From Vachernyaya Moskva. Jan-Dec. 1950

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, O.N.

Development of ring vessels in the English oak (Quercus robur L.). Nauch.dokl.vys.shkoly; biol.nauki no.1:124-128 '59. (MIRA 12:5)

1. Rekomendovana kafedroy vysshikh rasteniy Moskovskogo gosudarstvennogo universiteta im. M.V.Lomonosova.
(OAK) (WOOD--ANATOMY)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, O.N.

Structure of the elements of xylem in nodes of some horsetail species. Nauch.dokl.vys.shkoly; biol.nauki no.3:145-146 '59. (MIRA 12:10)

1. Rekomendovana kafedroy vysshikh rasteniy Moskovskogo gosudarstvennogo universiteta im. M.V.Lomonosova.
(Horsetail) (Plant cells and tissues)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, O.N.

Formation of tracheae in oak wood (Quercus robur L.) during its ontogenic development under different ecological conditions. Nauch. dokl.vys.shkoly; biol.nauki no.2:103-106 '60. (MIRA 13:4)

1. Rekomendovana kafedroy vysshikh rasteniy Moskovskogo gosudarstvennogo universiteta im. M.V. Lomonosova.
(WOOD--ANATOMY) (OAK)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

BARYKINA, Rimma Pavlovna; KOSTRIKOVA, Lidiya Nikolayevna; KOCHEMAROVA, Irina Pavlovna; LOTOVA, Lyudmila Ivanovna; TRANKOVSKIY, Daniil Aleksandrovich; CHISTYAKOVA, Ol'ga Nikolayevna; SOKOLOVA, N.A., red.; SHVETSOV, S.V., tekhn. red.

[Laboratory manual on plant anatomy] Praktikum po anatomii rastenii. [By] R.P.Barykina i dr.[n.p.] Rostovizdat, 1963. 183 p. (MIRA 16:10)

(Botany--Anatomy)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

GREGUSH, P. [Greguss, Pal]; FILIN, V.R.[translator]; CHISTYAKOVA, O.N.[translator]; DANIL'CHENKO, O.P., red.; MUKHINA, L.V., tekhn. red.

[A guide to the wood analysis of gymnosperms based on microscopic data] Opredelitel' drevesiny golosemennykh po mikroskopicheskim priznakam. Moskva, Izd-vo Mosk. univ. 1963. 183 p. Translated from the Hungarian. (MIRA 16:11)

(Wood--Anatomy) (Gymnosperms)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

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SOV/58-59-7- 15779

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Translation from: Referativnyy Zhurnal Fizika, 1959, Nr 7, p 160 (USSR)

AUTHORS: Kosman, M.S., Chistyakova, R.V.

TITLE: Experimental Study of Photoconductive Relaxation Times in Cuprous Oxide

PERIODICAL: Uch. zap. Leningr. gos. ped. in-ta im. A.I. Gertsena, 1958, Vol 148, pp 231 - 236

ABSTRACT: Using the taumeter method, the authors studied the temperature dependence of photoconductive relaxation times in Cu_2O in a range of temperatures from room temperature to 300°C. A Kerr cell was used in order to obtain square light pulses. The utilization of a "GIS-2" generator made it possible to vary the duration of light signals within the limits of 2×10^{-3} to 2×10^{-5} sec, as well as to vary the duration of dark intervals. Two components of photoconductivity were observed in Cu_2O samples with a specific resistivity of 3×10^4 ohm · cm: a short-lived component, prevailing at room temperature, with $\tau_1 \approx 2 \times 10^{-5}$ sec, and a long-lived component, prevailing at raised temperatures, with τ_2' (build-up of photocurrent) = 8.5×10^{-5} sec and τ_2'' (fall-off of photocurrent) = 1×10^{-4} sec at 200°C. The relaxation time of the long-lived component

Card 1/2

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CHISTYAKOVA, S.B.

CHISTYAKOVA, S.B., arkhitektor.

Playgrounds in residential blocks. Gor. khoz. Mosk. 32 no.1:26-30 Ja '58. (MIRA 11:1)

(Playgrounds)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, S.B., kand.arkhitektury; SEMENOVA, Ye.S., inzh.

Plantings in populated places in connection with problems of microclimate. Issl.po mikroklim.nasel.mest i zdan. i po stroi.fiz. no.2:6-19 '62. (MIRA 16:6)
(Landscape architecture) (Microclimatology)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, T. [Chystiakova, T.] (Moskva)

Great mystery of nature. Nauka i zhyttia 11 no.12:49-51 D '61. (MIRA 15:2)
(EMBRYOLOGY)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, T., zhurnalist (Moskva)

Mystery of salt layers. Nauka i zhyttia 12 no.9:34-36 S '62. (MIRA 16:1)

(Salt deposits) (Paleobotany, Stratigraphic)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

KOKURING, A.D., CHISTYAKOVA, T.F.

Kinetics of the reduction and oxidation of iron ore. Trudy LTI no.51:39-45 '59. (MIRA 13:8)
(Iron ores)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

L 44138-65

ACCESSION NR: AP5010843 UR/0020/65/161/004/0962/0963

AUTHOR: Telitchenko, M. M.; Chistyakova, T. I.

TITLE: Changes in concentration of nucleic acids in the gonads of [illegible]

SOURCE: AN SSSR. Doklady, v. 161, no. 4, 1965, 962-963

TOPIC TAGS: nucleic acid, uranium, gonad, ovary, testis, desoxyribonucleic acid, ribonucleic acid

ABSTRACT: Earlier histological investigations by the author indicated that uranium seems to injure the gonads of female fishes more than it does those of males. However, visual observations over several generations failed to show that males have greater resistance to uranium than do females. In view of the role of the nucleic acids in the transmission of hereditary information, the authors undertook to investigate the concentration of DNA and RNA in the [illegible] (*Leucaspius delineatus*) chronically exposed to uranium. The gonads of [illegible] 8 or 15 days in water containing solutions of uranyl nitrate [illegible] nium per liter] [illegible] a marked decrease in the DNA and RNA content [illegible]

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L 44138-65
ACCESSION NR: AP5010843

and 22%, respectively). The gonads of the females, on the other hand, did not change significantly in this respect; in fact, the DNA and RNA content increased slightly (DNA by 9% and RNA by 5% on the average). The authors conclude that testes of *Leucaspius delineatus* males are not more resistant to ... ovaries of the females. Orig. art. has: 1 table.

ASSOCIATION: ... gosudarstvennyy universitet imeni M. V. Lomonosova (Moscow State ...)

SUBMITTED: ... ENCL: 00

NO REF SOV: ... OTHER: 001

Card 2/2

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

KHRUSHCHEV, S.V., kand. med. nauk; CHISTYAKOVA, V.A.

Rare case of congenital heart defect. Sbor. nauch. trud. Ivan. gos. med. inst. no. 28:206-209 '63 (MIRA 19:1)

1. Iz kafedry gospital'noy pediatrii (zav. - dotsent A.N. Karlova) Ivanovskogo gosudarstvennogo meditsinskogo instituta (rektor - dotsent Ya.M. Romanov) i 1-y gorodskoy bol'nitsy g. Ivanovo (glavnyy vrach - L.I. Safarov).

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, V.F.,Cand Med Sci—(diss) "Phlegmonous processes in the tissues of the bottom of the oral cavity." Khar'kov,1958. 12 pp (Khar'kov State Med Inst), 200 copies (KL,49-58,128)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, V.F., kand. med. nauk

Anaerobic phlegmon of the parapharyngeal region. Stomatologiia 42 no.3:99-100 My-Je '63 (MIRA 17:1)

1. Iz chelyustno-litsevogo otdeleniya bol'nitsy No.32 (glavnyy vrach - kand. med. nauk I.S. Yefimov), Khar'kov.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, V.G.

FEDOROVA, A.D.; CHISTYAKOVA, V.G.; BLINOV, N.I., professor, zaveduyushchiy.

Electrocardiographic observations in heart wounds. Khirurgiia no.6:35-38 Je '53. (MLRA 6:8)

1. 3-ya kafedra khirurgii Gosudarstvennogo ordena Lenina instituta usovershenstvovaniya vrachey imeni S.M.Kirova.
(Heart--Wounds and injuries) (Electrocardiography)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, V. G., Master Med Sci — "Using the electrocardiograph to diagnose the changes in cardiac functions under the effect of surgery on abdominal cavity organs." Leningrad, 1957, 20 pp (State Inst of Advanced Physician Training, im. S. M. Kirova), 200 copies. (KL, No 40, 1957, p. 96)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, V.G. (Leningrad, Fontanka, d.20, kv. 6)

Changes in heart function during surgery of the abdominal organs [with summary of English, p.158]. Vest.khir. 78 no.6:54-60 Je '57. (MIRA 10:8)

1. Iz 1-y terapevticheskoy kafedry (zav. - prof. B.M.Prozorovskiy) Leningradskogo gosudarstvennogo ordena Lenina instituta usovershenstvovaniya vrachey im. S.M.Kirova

(ABDOMEN, surg.
perop. ECG)
(ELECTROCARDIOGRAPHY
perop. in abodm. surg.)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

KAPITSA, L.M., kand.med.nauk; FEDOROVA, A.D., kand.med.nauk; CHISTYAKOVA, V.G.

Ligation of the coronary vessels under experimental conditions. Sbor. nauch. trud. GIDUV no. 14:84-86 '58. (MIRA 13:10)

1. Iz kafedry operativnoy khirurgii (zav. prof. A.P. Nadein), III kafedry khirurgii (zav. prof. N.I. Blinov) I kafedry terapii (zav. prof. B.M. Prozorovskiy) gosudarstvennogo instituta dlya usovershenstvovaniya vrachey.
(CORONARY VESSELS—LIGATURE (SURGERY))

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, V.G.

Influence of surgery on the cardiovascular system. Sbor. nauch. trud. GIDUV no. 14:220-226 '58. (MIRA 13:10)

1. Iz eksperimental'nogo otdeleniya kafedry operativnoy khirurgii (zav. kafedroy prof. A.P. Nadein) i 1-y terapevticheskoy kafedry Gosudarstvennogo instituta dlya usovershenstvovaniya vrachey (zav. kafedroy prof. B.M. Prozorovskiy).
(SURGERY) (CARDIOVASCULAR SYSTEM)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, V.G., kand.med.nauk; VASIL'YEVA, T.P.; VYSOTSKIY, G.Ya.

Cardiac lesion in systemic and focal scleroderma. Terap.arkh. no.8:78-86 '62. (MIRA 15:12)

1. Iz 1-y terapevticheskoy kafedry (zav. - chlen-korrespondent AMN SSSR prof. N.N. Udintsev), kafedry nervnykh bolezney (zav. - deystvitel'nyy chlen AMN SSSR prof. S.N. Davidenkov) i 2-y terapevticheskoy kafedry (zav. - dotsent G.R. Britanishskiy) Gosudarstvennogo institutda dlya usovershenstvovaniya vrachey.
(HEART--DISEASES) (SCLERODERMA)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, V.I.

Clinical aspects and treatment of hypotrophy accompanied by frequent vomiting. Trudy mol. nauch. sotr. MONIKI no.1: 85-90 '59 (MIRA 16:11)

Effect of a limited decrease of the protein content in the food ration on the development of a growing organism. Ibid.:120-122

1. Iz pediatricheskoy kliniki (zav. prof. M.I.Olevskiy) Moskovskogo oblastnogo nauchno-issledovatel'skogo klinicheskogo instituta imeni Vladimirskogo.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, V. I.

Infants - Nutrition

Recommendation of breast feeding is a very important task of the public nurse. Med. sestra no. 2, 1952.

Monthly List of Russian Accessions, Library of Congress, April 1952. UNCLASSIFIED.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, V.I.; MALINOVSKAYA, T.N.

Change in some functions of the gastrointestinal tract in children's diseases. Trudy mol. nauch. sotr. MONIKI no.1: 95-100 '59 (MIRA 16:11)

1. Iz pediatricheskoy kliniki (zav.prof. M.I.Olevskiy) Moskovskogo oblastnogo nauchno-issledovatel'skogo klinicheskogo instituta imeni Vladimirskogo i kafedry rentgenologii (zav. prof. Yu.N.Sokolov) TSentral'nogo instituta usovershenstvovaniya vrachey.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, V.I.

Changes in the color sedimentation test of urine in children with severe, complicated hypotrophy during compound treatment and fully adequate nutrition. Lab. delo 8 no.2:51 F '62. (MIRA 15:2)

1. Pediatricheskaya klinika Moskovskogo oblastnogo nauchno-issledovatel'skogo klinicheskogo instituta imeni M.F.Vladimirskogo.
(URINE--ANALYSIS AND PATHOLOGY)
(DEFICIENCY DISEASES)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, V.I.

Clinical aspects and diagnosis of sympathogonioma in children.
Vop. klin. pat no.2:30-37 '61 (MIRA 16:12)

1. Iz pediatricheskoy kliniki (zav. - prof. M.I.Olevskiy) Moskovskogo oblastnogo naucimo-issledovatel'skogo klinicheskogo instituta imeni Vladimirskogo.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, V.I.

Drawing dies with wooden plates. Mashinostroitel' no.3:25 Mr '61. (MIRA 14:3)

(Dies(Metalworking))

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, V.M.

Absorption of an isotonic sodium chloride solution from the peritoneal cavity following disorders in the blood circulation. Akt.vop.perel. krovi no.7:365-372 '59. (MIRA 13:1)
(BLOOD--CIRCULATION, DISORDERS OF) (ABSORPTION (PHYSIOLOGY))

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

31457
S/629/60/000/003/003/011
D202/D305

5.3830

AUTHORS: Korshak, V. V., Sosin, S. L., and Chistyakova, V. M.

TITLE: The polyrecombination reaction as a method for producing polymers

SOURCE: Vsesoyuznoye khimicheskoye obshchestvo imeni D. I. Mendeleyeva. Uspekhi khimii i tekhnologii polimerov, sb. 3, Moscow, Goskhimizdat, 1960, 39-46.

TEXT: A summary and discussion of results obtained by the authors in their previous investigations, published in 1957 and 1958 (Izv. AN and DAN SSSR). It was found that for producing linear polymers from saturated compounds, it is necessary to use peroxides or other free-radical forming substances in the molar ratio at least 1 : 1 to the saturated compound. The formation of a p-di-iso-propyl benzene polymer with tert.-butyl peroxide is discussed in detail. Three different products were obtained: a) A low molecular weight condensation product consisting of dimers and trimers; b) a high molecular weight product (up to 10,000) linear, soluble in

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The polyrecombination reaction ...

benzene; c) a product insoluble in benzene which is believed to be three-dimensional. Formation of the linear polymer began when the ratio of the peroxide to the hydrocarbon was raised to 1 : 1 and complete polymerization took place with ratios of 1 : 2 or 1 : 3. In the authors' opinion, this proves that the second peroxide molecule begins to react not with the starting hydrocarbon, but with its lower condensation products. The chain growth proceeds with the formation and recombination of free radicals formed from the hydrocarbon. This has been termed a polyrecombination process. A mathematical relationship is given between the polymerization index n and N_R, the number of tertiary butoxyl radicals taking part in the reaction: $N_R = 2 - \frac{2}{n}$. The results were in fairly good agreement with this formula. As a method of synthesis of high molecular weight compounds, the polyrecombination reactions differ from polycondensation by the absence of any chain-destruction reversible processes. Formation of insoluble polymerization products is due to the splitting-off of hydrogen from the methyl groups in macromolecular radicals derived from the peroxide, thus linking the linear

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The polyrecombination reaction ...

molecules into three-dimensional networks. The authors refer to their experiments with different solvents which were carried out in order to avoid the formation of insoluble products, but in that case only compounds of low molecular weight have been obtained. Experiments with the same peroxide yielded linear polymers from the following hydrocarbons: p-dichlorobenzene, p -xylylendichloride, 4,4'-di-iso-propyl diphenyl, acetic and trifluoroacetic acid benzyl esters. [Abstractor's note: It is not clear if in this article the authors describe new work, or simply summarize their previous publications.] There are 3 figures and 14 references: 4 Soviet-bloc and 10 non-Soviet-bloc. The 4 most recent references to the English-language references read as follows: H. McBay, O. Tucker and A. Milligan, J. Org. Chem., 19, 869, (1954); ibid., 19, 1003, (1954); L. Beckwith and W. Waters, J. Chem. Soc., 1008, (1956); I. H. Brook, Trans. Faraday Soc., 53, 327, (1957).

Card 3/3

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

...HISTYAKOVA, V.S.

Effect of iron on biosynthesis of riboflavine (vitamin B_2) by Candida guilliermondii. G. M. Shavlovskii and V. S. Chistyakova (I. Franko State Univ., Lvov). Doklady Akad. Nauk S.S.S.R. 111, 887-9(1956).—Addn. of Fe to the culture medium (from 0.1 to 0.11 γ/ml.) lowers the yield of riboflavine with a slight retardation of growth of the yeast and shows a reduction of the rate of formation of riboflavine. In Burkhalder medium the increase of Fe even to 1 γ/ml. does not tend to destroy the already existing riboflavine, and the normal content of catalase activity in the cells. The organism tends to acidify the culture during growth, with pH drop to 2-2.5 being observed in several days, when Fe content is kept low and the riboflavine production is at high level. Among the acids, citric acid was identified.

G. M. Kos[illegible]apoff

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, Valentina Yakovlevna; GRINGAUZ, S., redaktor; IGNAT'YEVA, A., tekhnicheskiy redaktor

[Less expense, greater income] Men'she zatrat - bol'she dokhoda. [Moskva] Moskovskii rabochii, 1956. 67 p. (MLRA 10:3)

1. Sekretar' Kuntsevskogo Gorodskogo komiteta Kommunisticheskoy partii Sovetskogo Soyuza po zone Kuntsevskoy mashinno-traktornoy stantsii (for Chistyakova)
(Collective farms)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, V.Ya.

University in the task of raising better qualified agricultural workers for Kuntsevo District. Zemledelie 6 no.12:63-66 D '58. (MIRA 11:12)

1. Sekretar' Kuntsevskogo gorodskogo komiteta kommunisticheskoy partii Sovetskogo Soyuza.
(Moscow--Agricultural colleges)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

POKROVSKAYA, N.V.; CHISTYAKOVA, Ye.A.

Use of SG-1 cation exchanger for obtaining and purifying glucose oxidase. Prikl. biokhim. i mikrobiol. 1 no.1:118-122 Ja-F '65. (MIRA 18:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut pivovarennoy, bezalkogol'noy i vinodel'cheskoy promyshlennosti, Moskva.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

BASLAVSKAYA, S. S.; KOBLENTS-MISHKE, O. I.; UDALOVA, L. A.; CHISTYAKOVA, YE. A.

Plankton

Effect of fertilizers on photosynthetic activity of phytoplankton in a body of water. Dokl. AN SSSR, 82, No. 5, 1952. Moskovskiy Gosudarstvennyy Universitet im. M. V. Lomonosova rcd. 28 Nov. 1951.

SO: Monthly List of Russian Accessions, Library of Congress, July 1953, Uncl.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, Ye. A.; KURILENKO, O. D.

Determining the isoelectrical point of egg albumin by high-frequency titration. Izv.vys.ucheb.zav.; pishch.tekh.no. 2: 153-155 '64. (MIRA 17:5)

1. Kiyevskiy tekhnologicheskiy institut pishchevoy promyshlennosti, kafedra fizicheskoy i kolloidnoy khimii.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

POKROVSKAYA, N.V.; OGANEZOVA, N.A.; CHISTYAKOVA, Ye.A.; KISLYAKOVA, O.V.

Methods for the production of glucose oxidase enzyme preparations. Ferm. i spirt. prom. 31 no.7:22-25 '65. (MIRA 18:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut pivobezalkogol'noy i vinodel'cheskoy promyshlennosti.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

PED', D.A., CHISTYAKOVA, Ye.A.

Use of climatic data in making weather forecasts for a month in advance. Trudy TSIP no.89:158-166 '60. (MIRA 14:3)
(Weather forecasting)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

SHUSHEVSKAYA, G.M., kand. geograf. nauk; CHISTYAKOVA, Ye.A., kand. geograf. nauk

Weather forecasting for the U.S.S.R. in July, 1964. Meteor. i gidrol. no.6:65-68 Je '64 (MIRA 17:8)

1. Tsentral'nyy institut prognozov.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

SIDOCHENKO, M.V., kand.geograf.nauk; CHISTYAKOVA, Ye.A.

Weather forecast for the U.S.S.R. in April 1965. Meteor. i gidrol. no.4:65-68 Ap '65. (MIRA 18:4)

1. TSentral'nyy institut prognozov.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

BORODA, T.A., kand. khim. nauk; ROMAZANOVICH, N.P., kand. khim. nauk; POLOVKO, V.N., kand. tekhn. nauk; CHISTYAKOVA, Ya.A.; LIKHITSKAYA, V.S., inzh.

Purification of commercial lactic acid. Pishch. prom. no.1: 96-102 '65. (MIRA 18:11)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, YE. M.

USSR/Metals - Gas Analysis Metals, Ferrous Jan 50

"Determination of Gases in Ferrous Metals. Report I. Reconstruction of Equipment for the Vacuum-Fusion Method," Yu. A. Klyachko, A. G. Atlasov, Ye. M. Chistyakova, Cen Sci Res Inst of Ferrous Metal, 7 pp

"Zavod Lab" Vol XVI, No 1

Discusses possibility of applying vacuum-fusion method to determination of total quantity of hydrogen, oxygen, and nitrogen in ferrous metals. Describes structural modification of equipment and methodical improvements of extraction procedure which make possible use of vacuum-melting method in central laboratories of large metal-lurgical plants. Opinion of some metallurgists, that equipment is extremely complex, is not supported by authors.

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Chistyakova, Ye.M.

AUTHORS Klyachko, Yu.A., Kunin, L.L., Chistyakova, Ye.M. 32-8-5/61

TITLE A Comparative Evaluation of the Methods for Determining the Gas Content in Steel.
(Sravnitelnaya otsenka metodov opredeleniya gazov v stali.)

PERIODICAL Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 8, pp. 905-907 (USSR)

ABSTRACT In the paper a comparison between two different apparatus for vacuum melting is demonstrated: one of them with resistance furnace and volumetric analizer, and the other with high-frequency heating and analysis according to the pressure in calibrated volumes. The first apparatus was a PWP-2-system (Central Scientific Institute for Ferrous Metal Research) that was approved for works laboratories in 1955-56. The second apparatus was an improved construction of the already known apparatus proposed by the Institute for Geochemistry and Analytical Chemistry of the Academy of Science of the USSR which was equipped with a palladium filter and a copperoxide chamber. From the here described practical application of both apparatus the conclusion may be drawn that both yield good results.
1. The second apparatus permits to analyze gas mixtures

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A Comparison Evaluation of the Methods for Determining the Gas Content in Steel.

up to 0,5 cm^3 and is therefore well applicable for the analysis of metals with a gas content not exceeding 5 cm^3 per 100 g metal.
2. The employment of both apparatus is possible for the analysis of a gas content of 5-25 cm^3 per 100 g metal.
3. For an analysis of gas-saturated metals (more than 25 cm^3 per 100 g metal) the employment of the first apparatus is recommended.
(2 tables)

ASSOCIATION: Central Scientific Research Institute for Ferrous Metals. (Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii)

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Chistyakova, Ye. M.

AUTHORS: Klyachko, Yu.A., Kunin, L.L., Chistyakova, Ye.M., Larichev, N.S. 32-12-4/71

TITLE: Analysis of Gases in Steel by the Method of Heating in the Vacuum (Analiz gasov v stali metodom vakuum-nagreva).

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 12, pp. 1410-1412 (USSR)

ABSTRACT: The existing sources of errors of the rapid methods as well as the apparatus belonging to them consist, according to the opinion of the authors, in the fact, that the gas which was eliminated during the course of experiments carried out, was supposed only to be hydrogen, but, in reality, also CO_2 water vapor and CO were existant. A new apparatus is suggested in this paper which, first of all, permits the elimination and capture of vapor and highly volatile gases from the sample. The vapor is condensed and the water obtained is frozen-in and weighed; the captured gases are determined in the same manner. Next, the products are determined which are eliminated within the course of time. In this way the content of H_2, H_2O and CO_2 can be determined separately in the sample. The apparatus consists of a system of quartz tubes, to one end of which a tubular furnace containing the sample is fitted. The vacuum pump with the correspond-

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ing measuring devices is located at the other end of the system. In the system itself the interception chambers (extensions) for the capture of vapors and gases including the corresponding measuring devices are located, as well as a connection with the spectrograph. When carrying out the experiment the fact that part of the condensed vapor goes over to hydrogen, has to be taken into account, which can be determined spectrographically. Here it was determined that, if the eliminated vapors and gases are not eliminated from the part in which the heated sample is located, a decrease of vapor elimination with a simultaneous increase of forming of hydrogen takes place. There are 1 figure, 2 tables, and 4 Slavic references.

ASSOCIATION: Central Scientific Research Institute for Ferrous Metallurgy (Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii).

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

CHISTYAKOVA, Ye.M.

AUTHOR: Turovtseva, Z. M., Candidate of Physical and Mathematical Sciences

SOV/30-58-9-43/51

TITLE: Analysis of Gases in Metals (Analiz gazov v metallakh) Conference in Moscow (Soveshchaniye v Moskve)

PERIODICAL: Vestnik Akademii nauk SSSR, 1958, Nr 9, pp. 114 - 115 (USSR)

ABSTRACT: The conference took place in Moscow from June 24 to June 27. It was organized by: The Institut geokhimii i analiticheskoy khimii im.V.I.Vernadskogo i Komissiya po analiticheskoy khimii Akademii nauk SSSR (Institute of Geochemistry and Analytic Chemistry imeni V.I.Vernadskiy and the Committee for Analytic Chemistry of the AS USSR). 34 reports were heard and discussed.
Yu.A.Klyachko reported on different forms of the state of gases in metals and the selection of corresponding methods of analysis.
I.I.Kornilov spoke about the results of investigations of the phase diagram of the systems of the IV. column of elements containing oxygen and their importance for analytic chemistry.
L.L.Kunin, Ye.M.Chistyakova dealt with physico-chemical bases of gas determination in metals by means of melting

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in a vacuum.
A.N.Zaydel' and his collaborators reported on the further development of the isotopic equilibrium method for the determination of hydrogen in metals.
→ Ye.D.Malikova ~~report dealt with~~ "problems of oxygen analysis in alkaline and alkali earth metals."
The members of the conference stated that it is the most important task in the field of analysis of gases in metals to increase the sensitivity and exactness. The development of spectrum methods of gas analysis in metals has to be promoted. The industrial production of devices has to be organized.

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CHISTYAKOVA, Ye.M.

PHASE I BOOK EXPLOITATION SOV/4617

Akademiya nauk SSSR. Komissiya po analiticheskoy khimii

Analiz gazov v metallakh (Analysis of Gases in Metals) Moscow, 1960. 304 p. (Series: Its: Trudy, tom. 10) Errata slip inserted. 4,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut geokhimii i analiticheskoy khimii imeni V.I. Vernadskogo. Komissiya po analiticheskoy khimii.

Resp. Ed.: A.P. Vinogradov, Academician; Ed. of Publishing House: A.L. Bankvitser; Tech. Ed.: V.V. Bruzgul'.

PURPOSE: This book is intended for laboratory personnel concerned with gas analysis in metals.

COVERAGE: This collection of articles is based on materials of the Commission on Analytical Chemistry AS USSR on problems dealing with gas analysis in metals. The articles present data on: 1) The vacuum-fusion method, developed by European scientists and the Soviet scientists N.P. Chizhevskiy and Yu.A. Klyachko, for the analysis of gases in steel and aluminum, and now applicable to analysis of gases in other metals. 2) The research of Z.M. Turovtseva and coworkers at

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the Institute of Geochemistry and Analytical Chemistry imeni V.I. Vernadskiy AS USSR, Moscow, making it possible to evaluate the practicability and fields of application of the different analytical methods. 3) The contributions of Yu.A. Klyachko and coworkers in their study of thermodynamic methods for the evaluation of suitable conditions for carrying out analysis. 4) The determination of gases in metals by the sulfurous method as developed by A.K. Babko. 5) The spectrum isotope method for the determination of hydrogen as developed by A.N. Zaydel' and coworkers. The authors of these articles systematize and review critically the various analytical methods, describe the apparatus used in analysis, and indicate the basic trends of research. References accompany most of the articles.

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CHISTYAKOVA, YE.M.

PHASE I BOOK EXPLOITATION SOV/4443

Akademiya nauk SSSR. Komissiya po analiticheskoy khimii

Metody opredeleniya primesey v chistykh metallakh (Methods of Determining Admixtures In Pure Metals) Moscow, 1960. 411 p. (Series: Its: Trudy, 12) 3,500 copies printed.

Resp. Eds.: A.P. Vinogradov, Academician, and D.I. Ryabchikov, Doctor of Chemical Sciences; Ed. of Publishing House: M.P. Volynets; Tech. Ed.: T.V. Polyakova.

PURPOSE: This collection of articles is intended for chemists, metallurgists, and engineers.

COVERAGE: The articles describe methods for detecting and determining various admixtures and their traces in pure metals. Also discussed are many chemical, physicochemical, electrochemical, spectrochemical and luminescence methods of analyzing materials of high purity. The editors state that these methods have been developed within the last five or six years by various Soviet scientific institutes, and are now widely used in research and factory laboratories of the Soviet Union. No personalities are mentioned. References, mostly Soviet, accompany each article.

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Klyachko, Yu.A., Ye.M. Chistyakova, and L.L. Kunin. Determination of Oxygen

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

KLYACHKO, Yu.A.; CHISTYAKOVA, Ye.M.

Determining oxygen in titanium and zirconium by the vacuum smelting method. Trudy Kom. anal. khim. 12:126-131 '60. (MIRA 13:8)
(Titanium--Oxygen content) (Zirconium--Oxygen content)
(Vacuum metallurgy)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

KLYACHKO, Yu.A.; CHISTYAKOVA, Ye.M.; KUNIN, L.L.

Determination of oxygen and nitrogen in molybdenum and chromium by means of vacuum smelting. Trudy Kom. anal. khim. 12:281-287 '60. (MIRA 13:8)

(Molybdenum--Analysis) (Chromium--Analysis)
(Vacuum metallurgy)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

S/081/61/000/020/029/089
B117/B147

AUTHORS: Klyachko, Yu. A., Kunin, L. L., Chistyakova, Ye. M.

TITLE: Effect of an empty bath on the completeness of extraction in gas analysis in metals by the method of vacuum melting

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 20, 1961, 104-105, abstract 20D31 (Sb. tr. Tsentr. n.-i. in-t chernoy metallurgii, no. 19, 1960, 123-126)

TEXT: It was found that not all processes of reduction of oxides took place with formation of carbides under conditions of vacuum melting in a graphite crucible. No carbide phase was established by phase or X-ray structural analysis in alloy reguli obtained after extraction of gases from an Ст.3 (St. 3) steel sample. In steel regulus from St. 3 with 10% Ti, both methods showed the existence of carbide and carbonitride phases. Thus, the reduction mechanism of oxides depends on the metal nature, and must be studied individually for each case. It was also shown that there was a large quantity of suspended graphite particles, "graphite foam", in the upper part of a bar kept at higher temperature (~ 2000°C).

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Effect of an empty bath on ...

This "foam" thickens the upper part of the Fe bath, thus impeding the removal of gas bubbles escaping from the metal. Since it is possible that the gas is not removed completely due to the thickening of the bath during long thermal retardation, it is convenient to use the metal of the bath with the lowest gas content in order to shorten the degasification process. The amount of poorly melting metal samples to be filled in must be limited by the total duration of extraction $\leqslant$ 1.5 hr at $\leqslant$ 1750°C.
[Abstracter's note: Complete translation.]

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

S/081/61/000/020/033/089
B117/B147

AUTHORS: Klyachko, Yu. A., Kunin, L. L., Chistyakova, Ye. M.

TITLE: Precise formulation of the method of determining nitrogen in steel by the method of vacuum melting

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 20, 1961, 120, abstract 20D119 (Sb. tr. Tsentr. n.-i. in-t chernoy metallurgii, no. 19, 1960, 127-131)

TEXT: The authors studied the possibility of determining N_2 in steel on the basis of thermal dissociation of nitrides. Under conditions of vacuum melting, the direct decomposition of nitrides is accompanied by other processes promoting the separation of N_2, e.g., dissolution of a nitride-forming metal in the Fe bath, and formation of carbide. The authors calculated values of the dissociation pressure of nitrides for some metals taking account of the three dissociation mechanisms mentioned. They found that Mo, Si, and V nitrides may be easily decomposed in vacuum at 1500°C. Al, Zr, U, Ti, and Th nitrides do practically not dissociate in vacuum at $<1727°C$. With the use of an Fe bath, the elasticity of

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Precise formulation of the ...

dissociation increases (especially for Al and U nitrides). Decomposition of a nitride with subsequent carbide formation favors N_2 separation much more than metal dissolution in a bath: thus, Zn, Ti, U, and Th nitrides must completely decompose in the presence of excess carbon. In some cases, however (e.g. with Ti), the N_2 separated from the nitride may form another compound stable under conditions of vacuum melting. For determining the amount of N_2 in the composition of the separated mixture, the authors recommend the method of analyzing the non-absorbed residue; here, the effect of CH_4 and C_2H_6 formed in extraction gases and in volumetric analysis is ruled out. [Abstracter's note: Complete translation.]

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S/032/60/026/012/001/036
B020/B056

5.5200 1273, 1282, 1153

AUTHORS: Klyachko, Yu. A. and Chistyakova, Ye. M.

TITLE: A Thermodynamic Method of Determining the Conditions of the Analysis of Gases in Metals and Its Application for Working Out Analysis Methods

PERIODICAL: Zavodskaya laboratoriya, 1960, Vol. 26, No. 12, pp. 1335-1338

TEXT: The comparative determination of the extraction temperature of gases from various metals (Refs. 1-3) may be carried out by means of thermodynamic methods, the quantities P_{CO} and P_{N_2} being calculated from the equation

$$\log P = -\Delta F/4.575T,$$

where ΔF denotes the change in the free energy, viz., in the process

$$1/y \langle Me_xO_y \rangle + \langle C \rangle = (x/y) \{Me\} + (CO),$$

where this change is determined as the difference

$$\Delta F_1 - (1/y)\,\Delta F_2.$$

ΔF_1 denotes the change in the free energy of the reaction

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A Thermodynamic Method of Determining the Conditions of the Analysis of Gases in Metals and Its Application for Working Out Analysis Methods

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B020/B056

$\langle C \rangle + (1/2)(O_2) = (CO)$ and ΔF_2 the change in the free energy of the reaction $x\langle Me \rangle + (y/2)(O_2) = \langle Me_xO_y \rangle$. Metals with high affinity to carbon are able to form carbides, and thus to facilitate the reduction of the oxide or the dissociation of the nitride. For noncarbide-forming metals, the use of a bath may be of importance in the analysis for facilitating extraction. In this case

$$\Delta F = \Delta F_{CO} - (1/y)\Delta F_{Me_xO_y} + (x/y)\Delta F_{sol.}$$ holds for the extraction in the bath. The thermodynamic calculations carried out by the authors show that the carbide formation favors the determination of oxygen and nitrogen in Ti-, Zr-, Th-, and V-containing alloys; liberating the gases from Mo-, Si-, and Al-containing alloys is facilitated by alloying the metal investigated with iron. Analysis conditions must be chosen by taking account of the characteristics of the metals concerned. The authors determined the molar heats of mixing of various metals from the phase diagrams. After calculating the reaction energy as well as the entropy of a solution of a given concentration, an equation may be set up for the chemical potential of the liquid and the solid phase at the same tempera-

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A Thermodynamic Method of Determining the Conditions of the Analysis of Gases in Metals and Its Application for Working out Analysis Methods

S/032/60/026/012/001/036
B020/B056

ture. The condition for equilibrium is the equality of the chemical potentials. In this connection, a relation between the temperature ($T^{\circ}K$) and the concentration of the component B in the liquid and in the solid phase is set up, which permits determining the heat of mixing from the phase diagram of binary alloys. As the heats of solution and mixing are calculated by means of a simplified approximation, also the thermodynamic constants obtained may differ from the experimental values. Moreover, the phase diagrams obtained by different authors very often differ from one another. For the analysis of gases in metals by the method of the vacuum melt, the amount and the sign of the energy and heat of mixing must be known. For analyzing the gases, it is assumed that at negative values of the heat of mixing H_M (activity coefficient < 1), the partial pressure of the volatile component decreases more than in the case of an ideal solution, which obeys the Raoult law. By using specially selected baths, the quantity of the adsorption-active sublimate may be reduced, and the analytical results may be precisely formulated. The method suggested was used to work out a method of gas analysis in metallic manganese. The tank was produced from iron, copper, and nickel. There are 3 figures, 2 tables,

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A Thermodynamic Method of Determining the Conditions of the Analysis of Gases in Metals and Its Application for Working out Analysis Methods

S/032/60/026/012/001/036
B020/B056

and 8 references: 7 Soviet and 1 US.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii im. I. P. Bardina (Central Scientific Research Institute of Ferrous Metallurgy imeni I. P. Bardin)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910015-4

S/032/61/027/002/001/026
B134/B206

AUTHORS: Klyachko, Yu. A. and Chistyakova, Ye. M.

TITLE: Estimation of the completeness of extraction in the determination of gases in metals by the vacuum melting method

PERIODICAL: Zavodskaya laboratoriya, v. 27, no. 2, 1961, 135-138

TEXT: To determine the effect of the melting-pot metal on the gas separation during gas extraction by the vacuum melting method, the gas separation from various metals in different melting pots was automatically recorded. The pressure of the separated gas was recorded with an electronic ЭПП-09 (EPP-09) potentiometer at constant high vacuum and constant rate of suction. From the course of the kinetic curves of the extraction process, the course of the reduction of oxides and the decomposition of nitrides can be ascertained, and possible secondary reactions can be determined. The latter must be avoided for conducting an exact analysis. The tin pot recommended for exact hydrogen determination, a nickel pot, and an iron-molybdenum pot were tested; У 12 (U 12) and Ст.3 (St. 3) steels, as well as metallic manganese, were molten for this purpose. The best analytical results were

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obtained with the nickel pot; unstable gas separation was established for the iron-molybdenum pot as well as for the tin pot. The latter, however, produced the most stable hydrogen results, while the most accurate analytical results with respect to oxygen and nitrogen were obtained in the nickel pot. Satisfactory results were obtained in the nickel and also the tin pot for the analysis of St. 3 steel, since in this steel, with a higher gas content, slight losses of carbon monoxide and hydrogen do not greatly impair the analytical results. The gas separation from metallic manganese can be determined more accurately in copper pots than in iron pots, since work is carried out in the former at a lower temperature (1100°C) than in the latter (1500-1550°C), and the manganese sublimation can be reduced. The application of the method described is recommended for other gas determinations in various metals and alloys. There are 3 figures and 3 tables.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii im. I. P. Bardina
(Central Scientific Research Institute of Ferrous Metallurgy imeni I. P. Bardin)

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KLYACHKO, Yu.A.; KUNIN, L.L.; CHISTYAKOVA, Ye.M.

Determination of hydrogen in aluminum. Sbor. trud. TSNIICHM no.24:42-44 '62. (MIRA 15:6)
(Aluminum—Hydrogen content)

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